



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/797,999

03/10/2004

Lev M. Bolotin

1015-007.D1

5157

22898

7590

04/10/2006

THE LAW OFFICES OF MIKIO ISHIMARU
333 W. EL CAMINO REAL
SUITE 330
SUNNYVALE, CA 94087

EXAMINER

NICHOLSON III, LESLIE AUGUST

ART UNIT

PAPER NUMBER

3651

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,999	Applicant(s) BOLOTIN, LEV M.	
	Examiner Leslie A. Nicholson III	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments and Amendments

1. Applicant's arguments, filed 3/6/2006, with respect to the rejection(s) of claim(s) 1-22 under 35 USC 102(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as shown below.

Due to Applicant's amendments and/or arguments, all claim objections and rejections under 35 USC 112 2nd paragraph are hereby withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Bolotin USP 6,591,486.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

Art Unit: 3651

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Bolotin discloses a similar micro device assembly system programming system (10) comprising:

- An input feeder (76)
- A programming system (40), the programming system adjacent to the input feeder and positionable adjacent to the assembly system (10) (fig.1,3), the programming system having a plurality of in-line sockets (18)
- A handling system (20,32) operatively associated with the input feeder and the programming system (C5/L29-37,43-50)
- The programming system has the plurality of in-line sockets parallel to the linear row of micro devices provided by the input feeder (fig.1,3)
- The handling system is capable of only two axes of movement (fig.1,3)
- the input feeder and the processing system are collinear with the linear row of the input feeder collinear with the linear row of the processing system (fig.1,3)
- a transfer mechanism (14) operatively associated with the programming system
- a second input feeder (78)

Regarding claim 21,

- a longitudinally extending conveyor system (14)
- a robotic handling system (20,32)

Art Unit: 3651

- a control system (37)
- an input feeder having a width, a height, and a depth greater than the width, its depth perpendicular to and offset from the longitudinal length of the conveyor system (fig.1,3)
- a reject area (inherent from C3/L18-19)
- the input feeder is selected from a group of input feeder sources consisting of a tape and reel, a tray, tray stacker, tube, tube stacker, and a combination thereof (C5/L9-12)

4. Claims 11-18, 21-28, and 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated by White USP 6,230,067.

White discloses a similar micro device assembly system programming system (20) comprising:

- An input feeder (140) (C4/L63-67, C5/L1-8)
- A programming system (100), the programming system adjacent to the input feeder and positionable adjacent to the assembly system (116) (fig.2), the programming system having a plurality of in-line sockets (C5/L9-24, C8/L3-12)
- A handling system (120) operatively associated with the input feeder and the programming system (C4/L63-67, C5/L1-8)
- The programming system has the plurality of in-line sockets parallel to the linear row of micro devices provided by the input feeder (fig.2)
- The handling system is capable of only two axes of movement (fig.2)

Art Unit: 3651

- the input feeder and the processing system are collinear with the linear row of the input feeder collinear with the linear row of the processing system (fig.2)
- a transfer mechanism (110) operatively associated with the programming system (C6/L48-51)

Regarding claim 21,

- a longitudinally extending conveyor system (110)
- a robotic handing system (120)
- a control system (130)
- an input feeder having a width, a height, and a depth greater than the width, its depth perpendicular to and offset from the longitudinal length of the conveyor system (fig.2)
- a reject area (inherent from C2/L60-62)
- the input feeder is selected from a group of input feeder sources consisting of a tape and reel, a tray, tray stacker, tube, tube stacker, and a combination thereof (C8/L25-28)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3651

6. Claims 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over White USP 6,230,067 in view of Ma USP 5,651,176.

White discloses all the limitations of the claim (see ¶4), but does not expressly disclose a second input feeder.

Ma teaches a second input feeder for the purpose of allowing for synchronous mass production and thus the reduction of delays in circuit board fabrication (C3/L5-19).

At the time of invention it would have been obvious to one having ordinary skill in the art to employ a second input feeder, as taught by Ma, in the device of White, for the purpose of allowing for synchronous mass production and thus the reduction of delays in circuit board fabrication.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

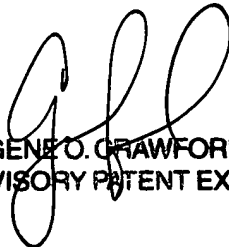
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.N.
4/5/2006


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER